AMENDMENTS TO THE CLAIMS

1. (**Currently Amended**) A method of making a genetic modification in a target gene of a plant cell comprising:

   a) providing a DNA fragment having a length of between 400 and 800 nt and having essentially the sequence of the targeted gene as modified or of the complement thereof, which fragment is not ~~Watson-Crick bound~~ hybridized to another nucleic acid;

   b) introducing the DNA fragment into the plant cell; and

   c) identifying the presence of the modified target gene.

2. (**Original**) The method of claim 1, wherein the DNA fragment is made substantially free of a complementary DNA prior to its introduction into the plant cell.

3. (**Original**) The method of claim 2, which further comprises the generation of a plant from the plant cell.

4. (**Previously Presented**) The method of claim 2, wherein providing the DNA fragment comprises separating a biotinylated DNA strand from a complementary non-biotinylated DNA strand, wherein the fragment is either the biotinylated strand or the non-biotinylated strand.

5. (**Original**) The method of claim 1, which further comprises the generation of a plant from the plant cell.

6. (**New**) The method of claim 1, wherein the plant cell is from a plant selected from the group consisting of rice, maize, wheat, soy, canola, sesame, sun flower, cotton and tobacco.

7. (**New**) The method of claim 1, wherein the target gene is selected from the group consisting of acetolactate synthase (ALS) and 5-enolpyruvyl-3-phosphoshikimate synthase (EPSPS).

8. (**New**) The method of claim 1, wherein the plant cell is a protoplast.

9. (**New**) The method of claim 8, wherein introducing the DNA fragment into the protoplast is effected by microinjection of the protoplast or by protoplast electroporation.

10. (**New**) The method of claim 1, wherein introducing the DNA fragment into the plant cell is effected by pollen electroporation or biolistic particle bombardment.

11. (**New**) The method of claim 1, wherein the DNA fragment does not comprise a selectable marker.

12. (**New**) The method of claim 6, wherein the plant cell is a protoplast.

13. (**New**) A method of making a genetic modification in a target gene of a plant cell comprising:

a) providing a single-stranded DNA fragment having a length of between 400 and 800 nt and having the sequence of the targeted gene as modified or of the complement thereof;

b) introducing the DNA fragment into the plant cell; and

c) identifying the presence of the modified target gene.

14. (**Original**) The method of claim 13, which further comprises the generation of a plant from the plant cell.

15. (**New**) The method of claim 13, wherein the plant cell is from a plant selected from the group consisting of rice, maize, wheat, soy, canola, sesame, sun flower, cotton and tobacco.

16. (**New**) The method of claim 13, wherein the target gene is selected from the group consisting of acetolactate synthase (ALS) and 5-enolpyruvyl-3-phosphoshikimate synthase (EPSPS).

17. (**New**) The method of claim 13, wherein the plant cell is a protoplast.

18. (**New**) The method of claim 17, wherein introducing the DNA fragment into the protoplast is effected by microinjection of the protoplast or by protoplast electroporation.

19. (**New**) The method of claim 13, wherein introducing the DNA fragment into the plant cell is effected by pollen electroporation or biolistic particle bombardment.

20. (**New**) The method of claim 15, wherein the plant cell is a protoplast.